



$$W = \frac{a^3}{4c}$$

max a
min c

$a = 15.4$ correct to 1 decimal place
 $c = 20$ correct to 2 significant figures.

15.45
19.5

Find the upper bound for W

$$W = \frac{15.45^3}{4 \times 19.5}$$

$$= 47.28145\dots$$

Write as a single fraction

$$\frac{1-x}{x+7} - \frac{4}{x-2}$$

$$\frac{-x^2 - x - 30}{(x+7)(x-2)}$$

$$= \frac{(1-x)(x-2) - 4(x+7)}{(x+7)(x-2)}$$

$$= \frac{x-2-2^2+2x-4x-28}{(x+7)(x-2)}$$

$$= \frac{-x^2 - x - 30}{(x+7)(x-2)}$$

Given

$$x^2 : (10x + 48) = 1 : 3$$

Find the possible values of x

$$3x^2 = 10x + 48$$

$$3x^2 - 10x - 48 = 0$$

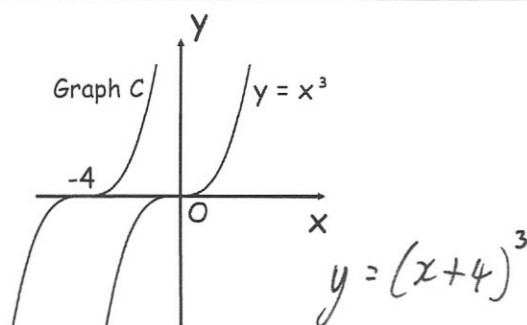
$$(3x+8)(x-6) = 0$$

$$x = -\frac{8}{3} \quad \text{or} \quad x = 6$$

Shown is the graph of $y = x^3$ and of graph C.

Write down the equation of Graph C

$$y = (x+4)^3$$



$(3, -4)$ is a point on the graph with equation $y = (x+7)^2 + a$

$$-4 = 100 + a$$

Find the coordinates of the turning point.

$$(-7, -104)$$

$$a = -104$$